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[Claim(s)]
[Claim 1] The auxiliary memory characterized by having the code and decoder which decrypt the data read from an auxiliary memory medium while enciphering the data written in an auxiliary memory medium.
[Claim 2] The auxiliary memory according to claim 1 which constituted the code and the decoder free [attachment and detachment] to the main part of equipment.
[Claim 3] The auxiliary memory according to claim 2 which equipped the attachment-and-detachment section of the code and the decoder with the lock mechanism.

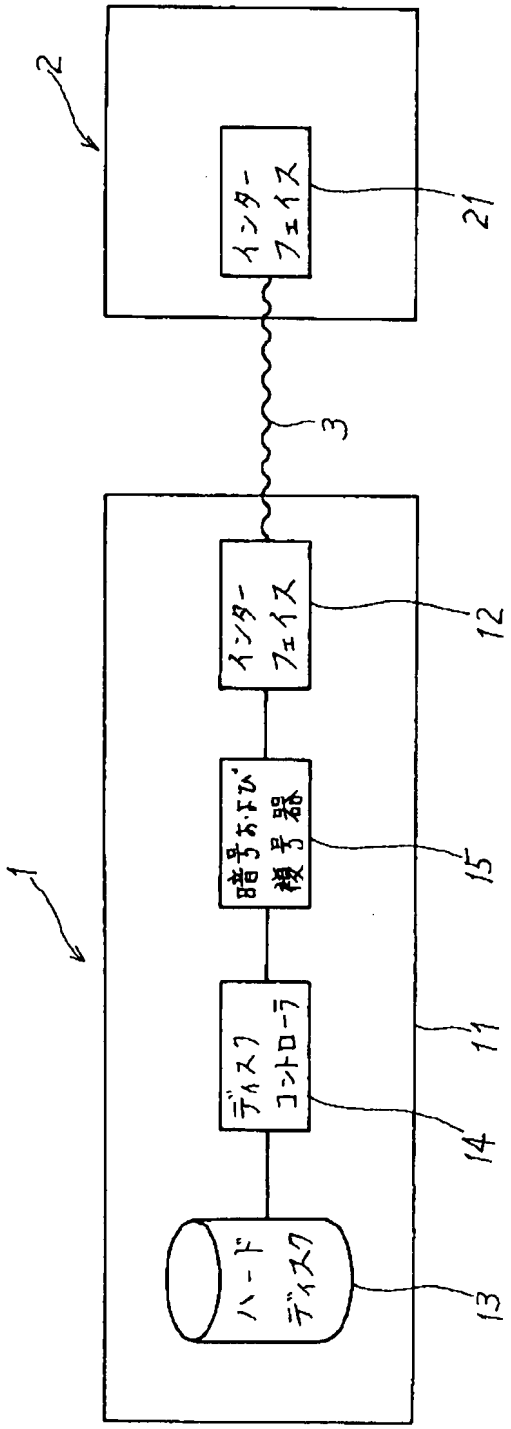
[Detailed Description of the Invention]
[0001]
[Industrial Application] This invention relates to the auxiliary memory for saving the data used by a computer.
[0002]
[Description of the Prior Art] In the conventional auxiliary memory, the data enciphered by the central processing unit of the main part of a computer is saved at the auxiliary memory, and after decrypting the data of an auxiliary memory by the central processing unit of the main part of a computer, it is used with the main part of a computer. Furthermore, the program for encryption was saved at the auxiliary memory without being enciphered.
[0003]
[Problem to be solved by the invention] However, in order to perform encryption and a decoding by the central processing unit of the main part of a computer according to the above-mentioned conventional composition, There was a problem that load was applied to the central processing unit of the main part of a computer, and the program for encryption came to hand from the auxiliary memory, and there was also a problem that it was possible to decode the enciphered data which is saved at the auxiliary memory.
[0004] Then, this invention aims at offering the auxiliary memory which may raise the security performance of the data saved at the auxiliary memory and auxiliary memory for reducing the load of the central processing unit of the main part of a computer in view of the above-mentioned conventional problem.
[0005]
[Means for solving problem] In order to attain the above-mentioned purpose, the 1st means of this invention is the auxiliary memory equipped with the code and decoder for decrypting, when reading the data enciphered from the auxiliary memory medium while enciphering the data written in an auxiliary memory medium.

[0006] Moreover, the 2nd means of this invention is the auxiliary memory which constituted the code and the decoder from a main part of an auxiliary memory free [attachment and detachment] in the 1st means. Furthermore, the 3rd means of this invention is the auxiliary memory which prepared the lock mechanism in the attachment-and-detachment section of the code and the decoder in the 2nd means.
[0007]
[Function] When the auxiliary memory constituted as mentioned above is connected to the main part of a computer, an auxiliary memory can perform encryption and a decoding, therefore the load of the central processing unit by the side of the main part of a computer can be reduced.
[0008] Moreover, since a code and a decoder can be kept at a place different from the main part of an auxiliary memory when a code and a decoder are constituted free [attachment and detachment] to the main part of an auxiliary memory, the security capability of the data in an auxiliary memory can be raised.
[0009] Furthermore, when a lock mechanism is prepared in the attachment-and-detachment section of a code and a decoder, the security capability in an auxiliary memory can be raised further.
[0010]
[Working example] The auxiliary memory of one working example of this invention is explained hereafter, referring to drawing 1 . In addition, drawing 1 shows the block diagram of an auxiliary memory.
[0011] In drawing 1 , 1 is the auxiliary memory connected to the main part 2 of a computer through connection Bath 3. In the main part 11 of equipment of this auxiliary memory 1, Interface Division (for example, SCSI Interface Division) 12 and the hard disk 13 for data storage (auxiliary memory medium), It consists of the codes and decoders 15 which perform the data encryption and decoding which were inserted between the disk controller 14 which controls this hard disk 13, and above-mentioned Interface Division 12 and a disk controller 14.
[0012] In addition, above-mentioned Interface Division 12 is connected to Interface Division 21 by the side of the main part 2 of a computer (SCSI Interface Division) through connection Bath 3. Operation of the auxiliary memory constituted as mentioned above is explained.
[0013] First, the case where data is sent to a hard disk 13 from the main part 2 of a computer is explained. That is, the data which is not enciphered is sent to the auxiliary memory 1 side from the main part 2 of a computer through the interface 21 by the side of the main part 2 of a computer, and connection Bath 3. This sent data goes into a code and a decoder 15 through the interface 12 by the side of the main part 11 of an auxiliary memory, and is enciphered here. And this enciphered data is written in the hard disk 13 controlled by a disk controller 14.
[0014] Next, the case where data is sent to the main part 2 of a computer from the auxiliary memory 1 side is explained. That is, a hard disk 13 is controlled by a disk controller 14, the enciphered data in a hard disk 13 is read, and this enciphered data goes into a code and a decoder 15, and is decrypted here.
[0015] And this decrypted data is sent to Interface Division 21 by the side of the main part of a computer through an interface 12 and connection Bath 3, and is read into the central processing unit in the main part 2 of a computer.
[0016] Thus, by equipping the auxiliary memory 1 side with a code and a decoder 15, it becomes unnecessary to perform encryption processing and decoding processing by the central processing unit by the side of the main part 2 of a computer, and the load of the central processing unit in the main part 2 of a computer can be reduced.
[0017] Moreover, in the above-mentioned working example, when a code and a decoder 15 are considered as the composition which can be detached and attached freely to the main part 11 of an auxiliary memory, the security capability of the data in the auxiliary memory 1 can be raised by removing the code and the decoder 15 after the termination of use of a computer.
[0018] Furthermore, when a lock mechanism (a key is formed, for example although not illustrated)

is prepared in the attachment-and-detachment section of a code and a decoder 15 whose attachment and detachment were enabled to the main part 11 of an auxiliary memory, the security capability of the data in the auxiliary memory 1 can be raised further.
[0019] In addition, in the above-mentioned working example, although the auxiliary memory medium was explained as a hard disk, you may be a magneto-optical disc.
[0020]
[Effect of the Invention] According to the composition of this invention, the load of the central processing unit of the main part of a computer is mitigable by forming a code and a decoder in an auxiliary memory as mentioned above. Moreover, the security capability of the data in an auxiliary memory can be raised by considering a code and a decoder as the composition which can be detached and attached freely to the main part of an auxiliary memory. Furthermore, the security capability of the data in an auxiliary memory can be further raised by preparing a lock mechanism in the attachment-and-detachment section of a code and a decoder.

[Brief Description of the Drawings]
[Drawing 1] It is the block diagram showing the outline composition of the auxiliary memory in one working example of this invention.
[Explanations of letters or numerals]
1 Auxiliary Memory
2 Main Part of Computer
11 Main Part of Auxiliary Memory
13 Hard Disk
15 Code and Decoder

[Drawing 1]



1 --- 補助記憶装置
2 --- 計算機本体
11 --- 補助記憶装置本体

[Translation done.]